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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	K	ATTORNEY DOCKET NO.
08/879,827	06/20/97	JO FUKU		DN 086210

HM22/0414
TOWNSEND AND TOWNSEND AND CREW LLP
TWO EMBARCADERO CENTER, 8TH FLOOR
SAN FRANCISCO CA 94111-3834

MOSHER EXAMINER

APR 1997	PAPER NUMBER
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04/14/98

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/879,827

Applicant(s)
Jofuku et al

Examiner
Mosher

Group Art Unit
1643



☒ Responsive to communication(s) filed on 11/30/98, 1/21/99,

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-37, 40, 41, and 45-109 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-4, 6-14, 16-25, 27-35, 37, 40, and 45 is/are rejected.

☒ Claim(s) 5, 15, 26, 36, 41, and 46-109 is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 11

☒ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Double Patenting

Claims 1-37, 40, 41, and 45-109 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-35 of copending Application No. 08/700,152, for reasons of record.

Claim Rejections - 35 USC § 112

Claims 1, 24, 35, 40, and 45 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a "new matter" rejection. These claims have been amended to recite modulation of "oil content"; the passage cited as support for this recites "fatty acid content". Since "oil content" is broader in scope than "fatty acid content", the recitation "oil content" is seen as new matter.

Claims 1-4, 6-14, 16-25, 27-34, 35, 37, 40, and 45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims have been amended to recite "at least 35% identical" or "at least 60% identical" of "at least 95% identical". The specification, on pages 6- 7, identifies a number of different algorithms which may be used to align sequences, and identifies a preferred program, and indicates an intention to use "standard parameters " for alignment. However, the specification does not teach the "standard parameters", and it is not clear

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that there is an art-accepted agreement on "standard parameters". Furthermore, since the different programs use different algorithms and generate different results from each other, the metes and bounds of the sequences generating "35% identical" are different for each program. Because the metes and bounds of the claimed subject matter are still not clear, the claims are rejected as indefinite.

Claims 1-4, 6-14, 16-25, 27-34, 35, 37, 40, and 45 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims, as amended, require a nucleic acid with a certain degree of structural similarity to a reference sequence, and a functional activity "encodes a polypeptide that modulates seed mass or oil content". The specification teaches a collection of different sequences with structural similarity to the reference sequence, and identifies regions that "may play a critical role in the function". However, in the experiments testing three different sequences for function, the specification shows that the actual results in transgenic plants are very variable. Therefore it is not clear whether the conserved structures identified in the specification are related to the functions recited in the claims. Furthermore, it is well known in the art that sequences which have some similarity in structure do not necessarily have the same biological function. For example "zinc finger" or "leucine zipper" structural motifs are common to many DNA binding proteins, but the proteins having these structures do not control the same genes. If there is not a recognized correlation between the structures taught in

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the specification and the function recited in the claims, then one skilled in the art cannot predict the structure of the nucleic acids which carry out the functions recited in the claims, and the specification does not meet the requirements for written description for the full scope of the claimed subject matter, despite the description of a collection of nucleic acids with structure similar to the reference sequence. See the Interim Guidelines for Examination of Patent Applications under the 35 USC 112 par. 1 "Written Description" Requirement", 1212 OG 15, July 7, 1998.

The claims are free of the art of record.

Allowable Subject Matter

Claims 5, 15, 26, 36, 41, and 46-109 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, and if double patenting issues are resolved

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary E. Mosher, Ph.D. whose telephone number is (703) 308-2926. The examiner can normally be reached on Monday -Thursday and alternate Fridays from 6:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Eisenschenk, can be reached on (703) 308-0452. The fax phone number for this Group is now (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196 .

April 12, 1999

Mary Mosher
MARY E. MOSHER
PRIMARY EXAMINER
GROUP 1800
1600